

rotating or moving parts of machinery or equipment normally exposed to contact by personnel.

#### HELICOPTER FACILITIES

##### § 108.231 Application.

Sections 108.231 through 108.241 apply to each unit with a helicopter landing facility.

##### § 108.233 Location and size.

(a) Each helicopter deck must be—

(1) At least the size of the rotor diameter of the largest single main rotor helicopter that will be used on the facility; or

(2) If tandem main rotor helicopters use the facility, at least of a size to provide a longitudinal axis of  $\frac{1}{10}$  the overall length of the helicopter, and a width of  $\frac{3}{4}$  of the overall length of the helicopter.

NOTE: For the purpose of paragraph (a)(2) the overall length is measured across both main rotors in the fore and aft line.

(b) Each helicopter deck must be located so as to provide clear approach/departure paths to enable the largest helicopter using the facility to operate in all weather conditions which allow helicopter operations.

##### § 108.235 Construction.

(a) Each helicopter deck must be designed to accommodate the loadings (static and dynamic) imposed by operation and stowage of helicopters intended to use the facility as well as environmental loadings (wind, wave, water, snow, etc.) anticipated for the unit.

(b) The adequacy of each helicopter deck for the loadings required in paragraph (a) of this section must be shown by design calculations. Where the placement of a load affects the suitability of a structural member, the load must be evaluated in the most unfavorable position for each member.

(c) The analysis required in paragraph (b) of this section must be based on the dead load of the structure, existing stresses in the deck when it is an integral part of a unit's structure, and each of the following loading conditions:

(1) *Uniform distributed loading.* A loading of  $2\text{kg/m}^2$  ( $42\text{ lb/ft}^2$ ) applied to the helicopter deck area.

(2) *Helicopter landing impact loading.* The limit load established by the limit drop test in 14 CFR 29.725, or a load of not less than 75 percent of the helicopter maximum weight taken on a square area of  $0.3 \times 0.3\text{ m}$  ( $1\text{ ft.} \times 1\text{ ft.}$ ) under each main landing gear unit applied anywhere on the helicopter deck area.

(3) *Stowed helicopter loading.* The helicopter maximum weight plus inertial forces from the helicopter due to anticipated unit motions, and applicable environmental loadings including wind loads.

(d) The landing area of each helicopter facility must—

(1) Have a non-skid surface;

(2) Have drainage facilities that prevent the collection of liquids and prevent liquids from spreading to or falling on other parts of the unit;

(3) Have recessed tie-down points; and

(4) Be free of projections, except that landing lights or other projections may be installed around the periphery of the landing deck provided they do not interfere with landing and take-off operations.

(e) The unprotected perimeter of each helicopter facility must have a safety net at least 1.5 meters (4.92 ft.) wide. The outer edge of the net must not extend more than 15 centimeters (6 in.) above the surface of the deck.

(f) Each helicopter facility must have both a main and an emergency access/egress route located as far apart from each other as practicable.

##### § 108.237 Fuel storage facilities.

(a) Helicopter fuel storage tanks must be installed as far as practicable from—

(1) The landing area; and

(2) Each source of vapor ignition.

(b) Independent tanks must meet Subpart 58.50 of this Chapter.

(c) Marine portable fuel stowage tanks must meet Part 64 of this chapter.

## **§ 108.239**

(d) Each marine portable fuel stowage tank must have a means to contain fuel spills or leaks.

[CGD 73-251, 43 FR 56808, Dec. 4, 1978, as amended by USCG-1999-6216, 64 FR 53226, Oct. 1, 1999]

### **§ 108.239 Fuel transfer equipment.**

(a) Each nozzle must be a "deadman" type.

(b) Each hose must have a storage reel.

(c) Each hose must have a static grounding device.

(d) Each electric fuel transfer pump must have a control with a fuel transfer pump operation indicator light at the pump.

(e) There must be a fuel pump shut off at each of the access routes required by § 108.235(f).

(f) Each fuel transfer pump and each hose reel must have a means to contain fuel spills or leaks.

(g) Each hose must meet chapter 3 "Aircraft Fueling Hose" of National Fire Protection Association Standard for Aircraft Fuel Servicing (N.F.P.A. No. 407-1975).

### **§ 108.241 Visual aids.**

(a) Each helicopter deck must—

(1) Have a wind direction indicator located in an unobstructed area readily visible to helicopter pilots approaching the deck;

(2) Be fitted around the perimeter with yellow and blue lights in alternate order, not more than 3 meters (10 ft.) apart; and

(3) Be marked with—

(i) The unit's identification;

(ii) A continuous line 40 centimeters (16 in.) wide on the perimeter; and

(iii) Aiming circles as may be appropriate considering deck configuration, helicopter type, and operational requirements.

(b) All markings must be in a contrasting color to the surface of the deck.

## **Subpart C—Stability**

### **§ 108.301 Stability.**

Each unit must meet the requirements in Subchapter S of this chapter

## **46 CFR Ch. I (10-1-07 Edition)**

that apply to Mobile Offshore Drilling Units.

[CGD 79-023, 48 FR 51008, Nov. 4, 1983]

## **Subpart D—Fire Extinguishing Systems**

### **§ 108.401 Fire main system.**

Each unit must have a fire main system.

### **§ 108.403 Fire extinguishing systems: General.**

(a) Each of the following on a unit must have an approved fixed gaseous type extinguishing system:

(1) Each paint locker, oil room, and similar space.

(2) Each enclosed space containing internal combustion or gas turbine main propulsion machinery.

(3) Each enclosed space containing internal combustion machinery with an aggregate power of at least 1000 B.H.P.

(4) Each enclosed space containing a fuel oil unit, including purifiers, valves, or manifolds for main propulsion machinery or internal combustion machinery with an aggregate power of at least 1000 B.H.P.

(5) Each enclosed ventilation system for electric motors or generators used for vital services including bilge pumps, fire pumps, or propulsion.

(b) Each space containing an oil fired boiler, the fuel oil unit or valves for the boiler, or manifolds in the line between the fuel settling tanks and the boiler on a unit must have a fixed gas type, foam, or other approved fire extinguishing system.

[CGD 73-251, 43 FR 56808, Dec. 4, 1978, as amended by CGD 95-027, 61 FR 26008, May 23, 1996]

### **§ 108.403a Fire extinguishing systems: Non-vital services.**

Each enclosed ventilating system for electric motors or generators not used for vital services must have an access into the system for firefighting or be protected by a fixed fire protection system.